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(54) Title: PROCESS FOR THE PREPARATION OF METHYLALUMINIUM DICHLORIDE

(57) Abstract: A process of preparing methylaluminium dichloride by (i) reacting by heating a material of the formula  $R_3Al_2X_3$ , where R is  $C_1$ - $C_4$  alkyl and X is selected from bromine and iodine with an aluminium-containing material selected from metallic aluminium and a mixture of metallic aluminium and aluminium trichloride in an atmosphere of methyl chloride, with the proviso that when R is methyl and X is iodine, the aluminium-containing material is a mixture of aluminium and aluminium trichloride; and (ii) when the aluminium-containing material is metallic aluminium, adding aluminium trichloride to this reaction mixture and heating, to give a crude reaction product; and (iii) if desired, obtaining methylaluminium dichloride from this crude reaction product. The crude reaction product may be used directly in organic syntheses, such as the cyclisation of  $\psi$ -Georgywood to give  $\beta$ -Georgywood.

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